

AMENDMENTS TO CLAIMS

This listing of claims will replace all prior versions, and listing, of claims in the application:

Listing of claims:

1. (Currently amended) An image sensor having a plurality of pixels, each pixel comprising:

a photocell which receives light and generates an analog signal corresponding to a quantity of the received light;

a latch type comparator which compares the analog signal of the photocell and an analog signal of a photocell of an adjacent pixel and generates a digital signal having a value of the compared result; and

a switch which outputs the digital signal of the latch type comparator under the control of the pixel select signal

wherein the digital signal is a digital signal having a 1-bit structure.

2. (Canceled)

3. (Canceled)

4. (Currently amended) The image sensor as claimed in claim 1, wherein the analog signal of the photocell of the adjacent pixel ~~reference signal~~ is a reference voltage.

5. (Original) The image sensor as claimed in claim 1, wherein the photocell is a photo diode that generates a photocurrent corresponding to the received quantity of light.

6. (Currently amended) The image sensor as claimed in claim 1, wherein the latch type comparator outputs a first signal when the analog signal of the photocell is greater than the analog signal of the photocell of the adjacent pixel~~reference signal~~ and outputs a second signal when the analog signal of the photocell is less than the analog signal of the photocell of the adjacent pixel~~reference signal~~.

7-14. (Canceled)

15. (Currently amended) An optical pointing system comprising:

a) a plurality of pixels, each having

a photocell which receives light and generates an analog signal corresponding to a quantity of the received light,[[and]]

a latch type comparator which compares the analog signal of the photocell and an analog signal of a photocell of an adjacent pixel and generates a digital signal having a value of the compared result, and

a switch which outputs the digital signal of the latch type comparator under the control of the pixel select signal;

b) an image processor which calculates a movement value using the digital signals outputted from the plurality of pixels and generates a pixel select signal and a shutter control information signal; and

c) a shutter control circuit which generates a shutter control signal corresponding to the shutter control information signal of the image processor,

wherein the digital signal is a digital signal having a 1-bit structure.

16-19. (Canceled)